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IN THE CLAIMS

1. (Currently amended) A stereoscopic image display apparatus comprising:
a light source radiating light of a wavelength in a predetermined wavelength range;
a one-dimensional spatial modulator configured to generate an arbitrary phase distribution using ~~including~~ one-dimensionally arrayed elements that are independently driven ~~to generate an arbitrary phase distribution~~; and
a scan unit scanning the light to a predetermined direction to display a stereoscopic image, the light being from said light source, having entered into said one-dimensional spatial modulator and having been modulated therein.
2. (Original) The stereoscopic image display apparatus according to claim 1, wherein
said scan unit scans the light modulated by said one-dimensional spatial modulator in a direction perpendicular to an arraying direction of the element of said one-dimensional spatial modulator.
3. (Original) The stereoscopic image display apparatus according to claim 1, wherein
said light source is provided with laser oscillators radiating laser beams having wavelengths in predetermined wavelength ranges severally corresponding to red, green and blue.
4. (Currently amended) The stereoscopic image display apparatus according to claim 1, said apparatus further comprising:
a diffuser panel diffusing modulated light scanned by said scan unit to display the stereoscopic image.
5. (Original) The stereoscopic image display apparatus according to claim 1, wherein

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said one-dimensional spatial modulator comprises a Grating Light Valve.

6. (Currently amended) A stereoscopic image display apparatus comprising:
a light source radiating light having a wavelength in a predetermined wavelength range;

a Grating Light Valve device having a plurality of ribbon-like elements and configured to generate an arbitrary phase distribution by that can independently drive driving each ribbon-like element therein to generate an arbitrary phase distribution;

a collimator lens making the light modulated by said Grating Light Valve device into parallel ray;

a scan unit scanning the parallel ray coming from said collimator lens;

a lens performing Fourier transformation on the scanned ray; and

a diffuser panel diffusing the ray Fourier transformed by said lens to display a stereoscopic image.

7. (Currently amended) A stereoscopic image display apparatus comprising:
means for radiating coherent light;

means for generating an arbitrary phase distribution by spatially modulating the coherent light in a one-dimensional direction to generate an arbitrary phase distribution;
and

means for scanning the modulated light to a predetermined direction orthogonal to said one-dimensional direction to display a stereoscopic image.

8. (Currently amended) A stereoscopic image display method comprising:
radiating coherent light;

generating an arbitrary phase distribution by spatially modulating the coherent light in a one-dimensional direction to generate an arbitrary phase distribution; and
displaying a stereoscopic image by scanning the modulated light to a predetermined direction orthogonal to said one-dimensional direction.